

## REMARKS

### I. Group Election

In response to the Restriction Requirement dated June 18, 2004, Applicants provisionally elect to prosecute Group I with traverse.

The Examiner has restricted the present Application into 6 different groups related to canine B7-2 proteins, methods of upregulating an immune response using canine B7-2 proteins and methods of downregulating an immune response proteins using canine B7-2 proteins, feline B7-2 proteins, methods of upregulating an immune response using feline B7-2 proteins and methods of downregulating an immune response proteins using feline B7-2 proteins. Group I, consisting of Claims 40-52, is drawn to canine B7-2 proteins and compositions thereof. B7-2 proteins of Group I claims include SEQ ID NO:7 and SEQ ID NO:17. Nucleic acid molecules encoding proteins of Group I include SEQ ID NO: 6, SEQ ID NO: 9, SEQ ID NO:16 and SEQ ID NO:19 while SEQ ID NO's 8, 10, 18 and 20 represent the respective complements. Group II, consisting of Claims 40-52, is drawn to feline B7-2 proteins and compositions thereof. B7-2 proteins of Group II claims include SEQ ID NO:26, SEQ ID NO:31 and SEQ ID NO:34. Nucleic acid molecules encoding proteins of Group II include SEQ ID NO:25, SEQ ID NO: 28, SEQ ID NO:30 and SEQ ID NO:33 while SEQ ID NO's 27, 29, 32 and 35 represent the respective complements.

### II. Restriction Between Groups I and II

The M.P.E.P at § 803.04 states that although independent and distinct inventions should normally be restricted by an Examiner, in the case of nucleotide sequences, the requirements of 37 C.F.R. §1.141 are partially waived and a reasonable number of nucleotide sequences that encode different proteins can be examined together. It has been determined that normally ten sequences constitute a reasonable number for examination purposes. It follows the same logic should apply to protein sequences. Groups I and II describe nucleic acid sequences encoding two closely related proteins, *i.e.* canine B7-2 and feline B7-2. The canine and feline B7-2 proteins are approximately 81% identical at the amino acid level as determined using SEQ ID NO's 6 and 9 and the NIH BLAST program set with default parameters. Additionally, the instant Application contains evidence that the canine B7-2 protein is capable of stimulating proliferation of canine T-cells. Further, the human B7-2 protein, which is approximately 60% identical to the

canine B7-2 protein, has also been shown to stimulate T-cell proliferation. This evidence suggests the feline protein, being much more closely related to the canine B7 protein than is the human B7 protein, will also have the same function. Since the sequences of the canine and feline proteins are so closely related and are likely to possess the same activity, Applicants respectfully submit that a thorough search for the subject matter of Group I would be sufficient to enable the examination of the claims of Group II without constituting an undue burden for the Examiner. Therefore, Applicants respectfully request rejoinder of Groups I and II.

### CONCLUSION

In view of the foregoing arguments, Applicants respectfully request that the Examiner withdraw the restrictions between Groups I and II. Applicants believe the current claim set to be in condition for allowance and solicit such from the Examiner. If there are any questions, the Examiner is invited to contact the undersigned at (970) 493-7272 ext. 4174.

Respectfully submitted,

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